### **EXECUTIVE SUMMARY**

TransCanada Keystone Pipeline, LP (Keystone) applied to the U.S. Department of State (DOS) for a Presidential Permit for the proposed construction, connection, operation, and maintenance of a pipeline and associated facilities at the United States border for importation of crude oil from Canada. The Keystone application is for its proposed Keystone XL Project (the proposed Project). Keystone also filed a right-of-way application under Section 28 of the Mineral Leasing Act of 1920 (MLA), as amended with the Bureau of Land Management (BLM) for the proposed Project across federal lands. DOS served as the lead federal agency for the environmental review of the proposed Project under the National Environmental Policy Act (NEPA), and issued a draft environmental impact statement (EIS) for public review on April 16, 2010. The public comment period for the draft EIS closed on July 2, 2010.

After the draft EIS was issued, new information and additional information became available on the proposed Project and on issues and resources related to the potential impacts of the proposed Project. To provide the public with the opportunity to review this information and to ensure openness and transparency in the NEPA environmental review process of the proposed Project, DOS has issued this supplemental draft EIS (SDEIS). While Secretarial Order 3310 *Protecting Wilderness Characteristic on Lands Managed by the BLM* was issued after publication of the draft EIS by Interior Secretary Salazar on December 22, 2010, the analysis of the implications of the Order on the proposed Project is ongoing. BLM will comply with the Order implementation in its processing of the Keystone application under the MLA.

### **Adequacy of the Draft EIS**

The draft EIS was developed in compliance with the scoping process required under NEPA and in compliance with the Council on Environmental Quality (CEQ) NEPA regulations. It includes relevant issues raised by the public and the agencies during the scoping period. DOS received thousands of comments on a wide variety of topics addressed in the draft EIS during the draft EIS comment period. Some commenters expressed concern that the draft EIS did not provide a sufficient analysis of the impacts of the proposed Project and requested that DOS issue an SDEIS for public review.

As part of its continuing evaluation of the adequacy of the draft EIS, DOS analyzed the new and additional information that became available after the draft EIS was issued and made a preliminary determination that there are no significant new circumstances or information concerning the proposed Project or its potential impacts not already considered in the draft EIS. The analysis further noted that while the range of alternatives to the proposed action considered in the draft EIS was sufficient to meet the requirements of NEPA, additional alternatives should be considered in response to public comments on the draft EIS. DOS therefore determined that submitting the portions of the EIS that were revised to address the new and additional information and to address related comments on the draft EIS for public and agency review would further the purposes of NEPA. As a result, DOS prepared and issued this SDEIS.

### **Contents of the SDEIS**

The SDEIS has been prepared and circulated in compliance with CEQ NEPA regulations and DOS guidelines (*Using Existing Environmental Analyses*). It includes copies of new reports and other documents relevant to the proposed Project and revisions to portions of the draft EIS.

To focus public attention on the topics that DOS determined would be of value for additional review, the SDEIS provides only information directly or indirectly related to those topics and does not include all sections that were presented in the draft EIS. However, the SDEIS incorporates the draft EIS by reference in compliance with CEQ NEPA regulations. The draft EIS is available for download from the DOS Keystone XL Project related website (www.keystonepipeline-xl.state.gov). The SDEIS addresses the following key issues:

## Revised information on proposed Project facilities; design, construction and maintenance, regulatory requirements; and potential connected actions

- Information on changes to the proposed Project facilities and construction of those facilities associated with withdrawal of the special permit application by Keystone and incorporation of the 57 Project-specific Special Conditions recommended by the U.S. Department of Transportation, Pipeline and Hazardous Material Safety Administration (PHMSA) that would apply for the lifetime of the proposed Project (e.g., lower maximum throughput and lower operating pressure than in the draft EIS, revised pipe wall thicknesses, change to the distance between mainline valves, and changes to construction procedures addressed by the Special Conditions);
- Relocation of the tank farm from Steele City, Nebraska to Cushing, Oklahoma;
- Revisions to Operations and Maintenance information due to incorporation of the 57 Projectspecific PHMSA Special Conditions and in response to comments on the draft EIS, including additional information on the development and review of a Project-specific Emergency Response Plan:
- Two additional non-federal connected actions, the Bakken Marketlink Project and the Cushing Marketlink Project, that were developed after the draft EIS was issued, and the potential impacts of implementation of those projects based on currently available information; and
- Additional information on future plans and decommissioning.

## Additional information on groundwater, potential spill impacts, alternatives to the proposed Project, and environmental justice considerations

- Additional information on potential impacts to groundwater due to an unintentional release of crude oil from the proposed Project, including additional information on the Northern High Plains Aquifer (NHPAQ) system, which includes the Ogallala aquifer, and the Sand Hills topographic region of Nebraska;
- Assessments of additional potential alternatives developed after the draft EIS was issued, including additional system alternatives, additional route alternatives (including alternative routes developed to avoid or minimize the distances through the Sand Hills topographic region and areas overlying the NHPAQ system), pipeline design alternatives, and alternatives to the locations of aboveground facilities; and
- Expanded information on environmental justice issues in response to EPA comments on the draft EIS.

# Additional information on crude oil composition, potential refinery emissions, and greenhouse gas (GHG) and climate change considerations

Additional information on the composition of the crude oil that would be transported by the
proposed Project and comparisons of that crude oil to other crude oils currently being refined in
Petroleum Administration Defense District (PADD) II and PADD III and revisions to the Oil

Spill Risk Assessment and Environmental Consequences section (that section has also been renamed to "Potential Releases from Project Construction and Operation and Environmental Consequence Analysis"); and

• Additional information on GHG emissions associated with the proposed Project based on information provided in recently completed reports (described below).

The main body of the SDEIS includes portions of sections of the EIS that have been revised to address the new and additional information, and in some cases, the entire section. To provide the proper context for the expanded, updated, and new information relevant to the NEPA environmental review of the proposed Project, the following sections are included in their entirety:

- Section 3.13 (Potential Releases from Project Construction and Operation and Environmental Consequences Analysis); and
- Section 4.0 (Alternatives).

Other sections of the SDEIS provide portions of revised EIS sections relevant to the topics listed above, including expansions of assessments of key environmental concerns that were included in the draft EIS and new information that was developed in response to comments on the draft EIS. Section 1.0 has been reorganized to include new sections for the Presidential Permit review process (Section 1.3) and an overview of the crude oil market (Section 1.4). Sections 1.2 (Purpose and Need), 1.3 and 1.4 of the SDEIS replace Section 1.2 of the draft EIS.

The portions of the EIS that are not included in the SDEIS have not been substantively revised. They will be included in the final EIS with minor revisions, including edits for clarification, corrections of typographical errors, minor expansion of existing information, and updates where appropriate. The final EIS will also include responses to comments on the draft EIS and responses to comments on the SDEIS.

The SDEIS also includes the following documents as appendices:

- A 2010 report prepared by EnSys Energy and Systems, Inc. (EnSys) contracted by the U.S. Department of Energy (DOE), Office of Policy & International Affairs. DOE contracted EnSys to evaluate different North American crude oil transport scenarios through 2030 to assist DOS in better understanding the potential impacts of the presence or absence of the proposed Project on U.S. refining and petroleum imports and also on international markets. The study also assessed global life-cycle GHG impacts of the scenarios evaluated. Although the study is a contractor report and does not necessarily represent the views of any U.S. government agency, it was conducted in close collaboration with and had significant input from DOE. The EnSys report, presented in Appendix A, was previously made available for public review on the DOS website as described in the notice of availability in the Federal Register on February 14, 2011 (Volume 76, Number 30);
- A 2011 report by ICF International (ICF) that was requested by DOS to assist in addressing
  concerns relative to GHG emissions. The report provides a detailed review of key studies in the
  existing literature that address life-cycle GHG emissions of petroleum products, particularly
  petroleum products derived from WCSB oil sands. The ICF report is presented in Appendix B;
- A set of 57 Project-specific Special Conditions developed in close consultation with PHMSA.
   Originally, PHMSA began development of these conditions in consideration of a special permit request from Keystone that, if granted, would have allowed Keystone to operate the proposed Project at a maximum operating pressure higher than that specified in 49 CFR 195.106. On

August 5, 2010, Keystone withdrew its application to PHMSA for a special permit. However, DOS continued to work with PHMSA and Keystone to develop Special Conditions in response to comments on the draft EIS regarding pipeline construction, operation, and maintenance. Keystone agreed to incorporate the Special Conditions into the proposed Project and if it is authorized and implemented, Keystone will include those conditions in its manual for operations, maintenance, and emergencies that is required by 49 CFR 195.402. The Special Conditions are presented in Appendix C;

- Information provided by Keystone in response to a Data Request from DOS regarding proposed construction procedures through the Sand Hills topographic region and consultation with the appropriate experts on the Sand Hills topographic region. This information is presented in Appendix D; and
- Water well data along the Proposed Keystone XL Project Route that was obtained by the DOS
  third-party contractor to expand information on existing groundwater conditions along the
  proposed route as a part of understanding the potential impacts of an unintentional release of
  crude oil from the proposed Project. This information is presented in Appendix E.

### Status of the DOS Review Process

#### **Environmental Review Process**

This SDEIS was prepared by revising portions of the text of the draft EIS in response to comments on the draft EIS and (as required) to address the information available after the draft EIS was issued. In addition, portions of the text of the draft EIS were updated using information that became available after the draft EIS was issued and portions of the text were edited to provide greater clarity. DOS invites interested parties to comment on this SDEIS during the 45-day comment period, which will begin on April 22, 2011 when EPA publishes a Notice of Availability (NOA) in the Federal Register and will end on June 6, 2011. DOS requests that comments be limited to the subject matter addressed in this SDEIS. DOS will consider all comments received during the comment period in preparation of the final EIS. Commenters do not need to resubmit their earlier comments on the draft EIS. Comments postmarked after the close of comment period will be considered to the extent practicable.

Comments on the SDEIS can be submitted to DOS using any of the following methods:

- DOS Keystone XL Project website: http://www.keystonepipeline-xl.state.gov
- Email: keystonexl@cardno.com
- Mail: Keystone XL EIS Project, P.O. Box 96503-98500, Washington, D.C. 20090-6503
- Fax: 206-269-0098

### National Interest Determination

After receipt of comments on the SDEIS and subsequent publication of a final EIS, DOS will begin a 90-day period for consultations with other federal agencies to determine if issuing a Presidential Permit for the proposed Project is in the National Interest. In addition, for the first 30 days after the final EIS is published, the public will also have the opportunity to comment on the National Interest Determination (NID). DOS plans to conduct another public meeting during this 30-day comment period. DOS expects a decision on whether to grant or deny the permit before the end of 2011.

### **Conclusions**

The draft EIS provided information on key environmental issues to allow a full understanding of the analysis of environmental effects. Although DOS received thousands of comments on a wide variety of topics addressed in the draft EIS during the comment period, no new issues of substance emerged from the comments received. DOS nonetheless determined that submitting the portions of the EIS that were revised to address the new and additional information and to address comments on the draft EIS for public and agency review would further the purposes of NEPA and prepared and issued this SDEIS. However, the information provided in this SDEIS does not alter the conclusions reached in the draft EIS regarding the need for and the potential impacts of the proposed Project.